WHAT IS CLAIMED

1   1.   A method for managing information for an application program, wherein

2   the information includes an information class having a plurality of attributes values,

3   wherein the application program maintains multiple information class instances and

4   wherein each instance includes at least one of the plurality of attribute values,

5   comprising:

6   receiving user input indicating a plurality of information class instances and for

7   each information class instance at least one attribute value;

8   generating a main directory for the application program;

9   for each information class instance received from the user, performing:

10   (i) generating a subdirectory from the main directory for the information

11   class instance;

12   (ii) for each received attribute value for the information class instance,

13   generating one attribute file providing the at least one attribute value; and

14   (iii) storing each generated attribute file in the subdirectory of the

15   information class instance for which the attribute value is provided.

1   2.   The method of claim 1, further comprising:

2   receiving a request for information on at least one requested attribute value for the

3   information class instances; and

4   in response to the request for information, performing for each information class

5   instance:

6   (i) accessing the subdirectory for the information class instance;

7   (ii) determining whether the accessed subdirectory includes each

8   requested attribute value in one attribute file in the subdirectory; and

9   (iii) if the subdirectory includes each requested attribute value in one

10   attribute file, then returning each requested attribute value from the attribute file.

1   3.   The method of claim 2, wherein the request for information further

2   includes a criteria to apply to at least one of the requested attribute values, further

3   comprising:

4   determining whether the requested attribute value in the attribute file to which the

5   criteria applies satisfies the criteria, wherein the attribute values for one information class

6   instance are not returned if the criteria for one attribute value of the information class

7   instance is not satisfied.

1   4.   The method of claim 2, wherein the subdirectory does not include one

2   attribute value if there is no attribute file for the attribute value.

1   5.   The method of claim 2, wherein returning the attribute value further

2   comprises:

3   generating the requested attribute values into a form, wherein the form includes

4   information on attribute values in attribute files in multiple subdirectories for information

5   class instances, and wherein the form is returned.

1   6.   The method of claim 5, wherein the form is implemented in a standard

2   document format capable of being rendered by a viewer program used to render

3   documents retrieved from over a network.

1   7.   The method of claim 6, wherein the form is implemented as one of a

2   HyperText Markup Language file or Extensible Markup Language (XML) file and the

3   viewer program comprises an Internet browser program.

1   8.   The method of claim 1, wherein at least one attribute file provides the

2   attribute value by embedding the attribute value in a file name of the attribute file.

1   9.   The method of claim 1, wherein at least one attribute file provides the

2   attribute value by inserting the attribute value within the attribute file.

1   10.   The method of claim 1, wherein at least one attribute value is comprised

2   of multiple component values.

1   11.   The method of claim 10, wherein each of the multiple component values is

2   capable of being comprised of a plurality of multiple sub-component values.

1   12.   The method of claim 1, wherein the information class comprises a first

2   information class and wherein a second information class is a subclass of the first

3   information class and has at least one attribute value, wherein there is one instance of the

4   second information class for each instance of the first information class, further

5   performing for each instance of the first information class:

6   generating a subdirectory for the second information class in the subdirectory

7   generated for the first information class.

1   13.   The method of claim 12, further comprising:

2   receiving user input for one attribute value for the second information class; and

3   generating one attribute file for the received user input in the subdirectory for the

4   second information class, wherein the attribute file provides the received attribute value.

1   14.   The method of claim 12, wherein the attribute value for the second

2   information class for which the attribute file was generated includes at least one attribute

3   value from the first information class.

1   15.   The method of claim 1, further comprising:

2   receiving a request for statistical information on requested attribute values;

3   for each information class instance, performing:

4   (i) reading the attribute files for the requested attribute values to generate

5   information summarizing the attribute values;

6   (ii) and returning the information summarizing the attribute values.

1   16.   A method for managing information on a plurality of projects, wherein

2 each project is capable of having a plurality of attribute values, comprising:

3   receiving user input on a plurality of projects and for each project at least one

4 attribute value;

5   generating a main directory;

6   for each project for which user input is received, performing:

7   (i) generating a subdirectory from the main directory for the project; and

8   (ii) for each received attribute value, generating one attribute file

9 providing the at least one attribute value.

1   17.   The method of claim 16, wherein the attribute values for each project are

2 capable of comprising one or more of the following project attribute values: project

3 comments, a project manager, projected completion date, project purpose, project start

4 date, project actual completion date, project status, project holidays, and project

5 interrupts.

1   18.   The method of claim 17, wherein the project interrupts attribute value in

2 the project interrupt file is comprised of multiple interrupt components, wherein each

3 interrupt component includes subcomponents indicating a type of interrupt, date of

4 interrupt, duration of interrupt, and interrupt comments.

1   19.   The method of claim 16, further comprising:

2   receiving a request for information on at least one requested attribute value for the

3 project; and

4   in response to the request for information, performing for each project

5 subdirectory;

6   (i) accessing the project subdirectory;

7   (ii) determining whether the accessed project subdirectory includes each

8 requested attribute value in one attribute file in the subdirectory;

9   (iii) if the subdirectory includes each requested attribute value in one

10 attribute file, then returning each requested attribute value from the attribute file.

1   20.   The method of claim 19, wherein the request for information further

2 includes a criteria to apply to the requested attribute values, wherein the criteria specifies

3 a status of the project, further comprising:

4   determining whether the requested attribute value in the attribute file to which the

5 criteria applies satisfies the criteria, wherein the attribute values for one project

6 subdirectory are not returned if the criteria for one attribute value is not satisfied.

1   21.   The method of claim 16, further comprising:

2   generating a calendar subdirectory for each project subdirectory, wherein the

3 calendar subdirectory includes one calendar file for each day for which calendar

4 information is provided for the project.

1   22.   The method of claim 21, wherein the calendar information for one day and

2 one project is entered by a user.

1   23.   The method of claim 21, wherein the calendar information entered into

2 one calendar file for one project comprises one attribute value received from the user for

3 the project that is also entered into one attribute file in the project subdirectory.

1   24.   The method of claim 16, further comprising:

2   receiving user input for at least one task for one project;

3   for each task for which user input is received, generating a task subdirectory in

4   the subdirectory for the project including the task; and

5   for each received attribute value providing information on the task, generating at

6   least one attribute file indicating each received attribute value.

1   25.   The method of claim 24, further comprising:

2   receiving user input for one task indicating a number of subtasks;

3   receiving user input indicating a percent completion for each subtask of the task;

4   and

5   for each received percent completion for one subtask, generating at least one

6   attribute file indicating the percent completion of the subtask.

1   26.   A system for managing information for an application program, wherein

2   the information includes an information class having a plurality of attributes values,

3   wherein the application program maintains multiple information class instances and

4   wherein each instance includes at least one of the plurality of attribute values,

5   comprising:

6   means for receiving user input indicating a plurality of information class instances

7   and for each information class instance at least one attribute value;

8   means for generating a main directory for the application program;

9   means for performing, for each information class instance received from the user:

10   (i) generating a subdirectory from the main directory for the information

11   class instance;

12   (ii) for each received attribute value for the information class instance,

13   generating one attribute file providing the at least one attribute value; and

14   (iii) storing each generated attribute file in the subdirectory of the

15   information class instance for which the attribute value is provided.

1   27.   The system of claim 26, further comprising:

2   means for receiving a request for information on at least one requested attribute

3 value for the information class instances; and

4   means for performing, in response to the request for information, for each

5 information class instance:

6   (i) accessing the subdirectory for the information class instance;

7   (ii) determining whether the accessed subdirectory includes each

8 requested attribute value in one attribute file in the subdirectory; and

9   (iii) if the subdirectory includes each requested attribute value in one

10 attribute file, then returning each requested attribute value from the attribute file.

1   28.   The system of claim 27, wherein the request for information further

2 includes a criteria to apply to at least one of the requested attribute values, further

3 comprising:

4   means for determining whether the requested attribute value in the attribute file to

5 which the criteria applies satisfies the criteria, wherein the attribute values for one

6 information class instance are not returned if the criteria for one attribute value of the

7 information class instance is not satisfied.

1   29.   The system of claim 27, wherein the means for returning the attribute

2 value further performs:

3   generating the requested attribute values into a form, wherein the form includes

4 information on attribute values in attribute files in multiple subdirectories for information

5 class instances, and wherein the form is returned.

1   30.   The system of claim 26, wherein the information class comprises a first

2 information class and wherein a second information class is a subclass of the first

3 information class and has at least one attribute value, wherein there is one instance of the

4 second information class for each instance of the first information class, wherein the

5 means for performing for each instance of the first information class further performs:

6 generating a subdirectory for the second information class in the subdirectory

7 generated for the first information class.

1 31. A system for managing information on a plurality of projects, wherein

2 each project is capable of having a plurality of attribute values, comprising:

3 means for receiving user input on a plurality of projects and for each project at

4 least one attribute value;

5 means for generating a main directory;

6 means for performing for each project for which user input is received:

7 (i) generating a subdirectory from the main directory for the project; and

8 (ii) for each received attribute value, generating one attribute file

9 providing the at least one attribute value.

1 32. The system of claim 31, wherein the attribute values for each project are

2 capable of comprising one or more of the following project attribute values: project

3 comments, a project manager, projected completion date, project purpose, project start

4 date, project actual completion date, project status, project holidays, and project

5 interrupts.

1 33. The system of claim 32, wherein the project interrupts attribute value in

2 the project interrupt file is comprised of multiple interrupt components, wherein each

3 interrupt component includes subcomponents indicating a type of interrupt, date of

4 interrupt, duration of interrupt, and interrupt comments.

1 34. The system of claim 31, further comprising:

2 means for receiving a request for information on at least one requested attribute

3 value for the project; and

4   means for performing, for each project subdirectory, in response to the request for

5   information:

6   (i) accessing the project subdirectory;

7   (ii) determining whether the accessed project subdirectory includes each

8   requested attribute value in one attribute file in the subdirectory;

9   (iii) if the subdirectory includes each requested attribute value in one

10   attribute file, then returning each requested attribute value from the attribute file.

1   35.   The system of claim 31, further comprising:

2   means for generating a calendar subdirectory for each project subdirectory,

3   wherein the calendar subdirectory includes one calendar file for each day for which

4   calendar information is provided for the project.

1   36.   The system of claim 31, further comprising:

2   means for receiving user input for at least one task for one project;

3   means for generating, for each task for which user input is received, a task

4   subdirectory in the subdirectory for the project including the task; and

5   means for generating, for each received attribute value providing information on

6   the task, at least one attribute file indicating each received attribute value.

1   37.   The system of claim 36, further comprising:

2   means for receiving user input for one task indicating a number of subtasks;

3   means for receiving user input indicating a percent completion for each subtask of

4   the task; and

5   means for generating, for each received percent completion for one subtask, at

6   least one attribute file indicating the percent completion of the subtask.

1 38.   An article of manufacture including code for managing information for an

2 application program, wherein the information includes an information class having a

3 plurality of attributes values, wherein the application program maintains multiple

4 information class instances and wherein each instance includes at least one of the

5 plurality of attribute values, wherein the code causes operations to be performed

6 comprising:

7   receiving user input indicating a plurality of information class instances and for

8 each information class instance at least one attribute value;

9   generating a main directory for the application program;

10   for each information class instance received from the user, performing:

11   (i) generating a subdirectory from the main directory for the information

12 class instance;

13   (ii) for each received attribute value for the information class instance,

14 generating one attribute file providing the at least one attribute value; and

15   (iii) storing each generated attribute file in the subdirectory of the

16 information class instance for which the attribute value is provided.

1 39.   The article of manufacture of claim 38, further comprising:

2   receiving a request for information on at least one requested attribute value for the

3 information class instances; and

4   in response to the request for information, performing for each information class

5 instance:

6   (i) accessing the subdirectory for the information class instance;

7   (ii) determining whether the accessed subdirectory includes each

8 requested attribute value in one attribute file in the subdirectory; and

9   (iii) if the subdirectory includes each requested attribute value in one

10 attribute file, then returning each requested attribute value from the attribute file.

1   40.   The article of manufacture of claim 39, wherein the request for

2 information further includes a criteria to apply to at least one of the requested attribute

3 values, further comprising:

4   determining whether the requested attribute value in the attribute file to which the

5 criteria applies satisfies the criteria, wherein the attribute values for one information class

6 instance are not returned if the criteria for one attribute value of the information class

7 instance is not satisfied.

1   41.   The article of manufacture of claim 39, wherein the subdirectory does not

2 include one attribute value if there is no attribute file for the attribute value.

1   42.   The article of manufacture of claim 39, wherein returning the attribute

2 value further comprises:

3   generating the requested attribute values into a form, wherein the form includes

4 information on attribute values in attribute files in multiple subdirectories for information

5 class instances, and wherein the form is returned.

1   43.   The article of manufacture of claim 42, wherein the form is implemented

2 in a standard document format capable of being rendered by a viewer program used to

3 render documents retrieved from over a network.

1   44.   The article of manufacture of claim 43, wherein the form is implemented

2 as one of a HyperText Markup Language file or Extensible Markup Language (XML) file

3 and the viewer program comprises an Internet browser program.

1   45.   The article of manufacture of claim 38, wherein at least one attribute file

2 provides the attribute value by embedding the attribute value in a file name of the

3 attribute file.

1   46.   The article of manufacture of claim 38, wherein at least one attribute file

2 provides the attribute value by inserting the attribute value within the attribute file.

1   47.   The article of manufacture of claim 38, wherein at least one attribute value

2 is comprised of multiple component values.

1   48.   The article of manufacture of claim 38, wherein each of the multiple

2 component values is capable of being comprised of a plurality of multiple sub-component

3 values.

1   49.   The article of manufacture of claim 38, wherein the information class

2 comprises a first information class and wherein a second information class is a subclass

3 of the first information class and has at least one attribute value, wherein there is one

4 instance of the second information class for each instance of the first information class,

5 further performing for each instance of the first information class:

6   generating a subdirectory for the second information class in the subdirectory

7 generated for the first information class.

1   50.   The article of manufacture of claim 49, further comprising:

2   receiving user input for one attribute value for the second information class; and

3   generating one attribute file for the received user input in the subdirectory for the

4 second information class, wherein the attribute file provides the received attribute value.

1   51.   The article of manufacture of claim 49, wherein the attribute value for the

2 second information class for which the attribute file was generated includes at least one

3 attribute value from the first information class.

1   52.   The article of manufacture of claim 38, further comprising:

2   receiving a request for statistical information on requested attribute values;

3   for each information class instance, performing:

4   (i) reading the attribute files for the requested attribute values to generate

5   information summarizing the attribute values;

6   (ii) and returning the information summarizing the attribute values.

1   53.   An article of manufacture including code for managing information on a

2   plurality of projects, wherein each project is capable of having a plurality of attribute

3   values, wherein the code causes operations to be performed comprising:

4   receiving user input on a plurality of projects and for each project at least one

5   attribute value;

6   generating a main directory;

7   for each project for which user input is received, performing:

8   (i) generating a subdirectory from the main directory for the project; and

9   (ii) for each received attribute value, generating one attribute file

10   providing the at least one attribute value.

1   54.   The article of manufacture of claim 53, wherein the attribute values for

2   each project are capable of comprising one or more of the following project attribute

3   values: project comments, a project manager, projected completion date, project purpose,

4   project start date, project actual completion date, project status, project holidays, and

5   project interrupts.

1   55.   The article of manufacture of claim 54, wherein the project interrupts

2   attribute value in the project interrupt file is comprised of multiple interrupt components,

3   wherein each interrupt component includes subcomponents indicating a type of interrupt,

4   date of interrupt, duration of interrupt, and interrupt comments.

1   56.   The article of manufacture of claim 53, further comprising:

2   receiving a request for information on at least one requested attribute value for the

3   project; and

4   in response to the request for information, performing for each project

5   subdirectory;

6   (i) accessing the project subdirectory;

7   (ii) determining whether the accessed project subdirectory includes each

8   requested attribute value in one attribute file in the subdirectory;

9   (iii) if the subdirectory includes each requested attribute value in one

10   attribute file, then returning each requested attribute value from the attribute file.

1   57.   The article of manufacture of claim 56, wherein the request for

2   information further includes a criteria to apply to the requested attribute values, wherein

3   the criteria specifies a status of the project, further comprising:

4   determining whether the requested attribute value in the attribute file to which the

5   criteria applies satisfies the criteria, wherein the attribute values for one project

6   subdirectory are not returned if the criteria for one attribute value is not satisfied.

1   58.   The article of manufacture of claim 53, further comprising:

2   generating a calendar subdirectory for each project subdirectory, wherein the

3   calendar subdirectory includes one calendar file for each day for which calendar

4   information is provided for the project.

1   59.   The article of manufacture of claim 58, wherein the calendar information

2   for one day and one project is entered by a user.

1   60.   The article of manufacture of claim 58, wherein the calendar information

2   entered into one calendar file for one project comprises one attribute value received from

3   the user for the project that is also entered into one attribute file in the project

4   subdirectory.

1   61.   The article of manufacture of claim 53, further comprising:

2   receiving user input for at least one task for one project;

3   for each task for which user input is received, generating a task subdirectory in

4   the subdirectory for the project including the task; and

5   for each received attribute value providing information on the task, generating at

6   least one attribute file indicating each received attribute value.

1   62.   The article of manufacture of claim 61, further comprising:

2   receiving user input for one task indicating a number of subtasks;

3   receiving user input indicating a percent completion for each subtask of the task;

4   and

5   for each received percent completion for one subtask, generating at least one

attribute file indicating the percent completion of the subtask.

1   63.   A computer readable medium including information for an application

2   program, wherein the information includes an information class having a plurality of

3   attributes values, wherein the application program maintains multiple information class

4   instances and wherein each instance includes at least one of the plurality of attribute

5   values, comprising:

6   a main file directory for the application program;

7   one subdirectory from the main directory for each information class instance; and

8   one attribute file for each attribute value for each information class instance,

9   wherein each attribute file provides one attribute value and is in the subdirectory of the

10 information class instance for which the attribute value is provided.

1   64.   The computer readable medium of claim 63, wherein at least one attribute

2   file provides the attribute value by embedding the attribute value in a file name of the

3   attribute file.

1   65.   The computer readable medium of claim 63, wherein at least one attribute

2   file provides the attribute value by inserting the attribute value within the attribute file.

1   66.   The computer readable medium of claim 63, wherein the information class

2   comprises a first information class and wherein a second information class is a subclass

3   of the first information class and has at least one attribute value, wherein there is one

4   instance of the second information class for each instance of the first information class,

5   further comprising:

6   a subdirectory for the second information class for each first information class in

7   the subdirectory generated for the first information class.

1   67.   A computer readable medium including information on a plurality of

2   projects, wherein each project is capable of having a plurality of attribute values,

3   comprising:

4   a main directory;

5   a subdirectory from the main directory for the project; and

6   one attribute file for each attribute value providing the at least one attribute value.

1   68.   The computer readable medium of claim 67, wherein the attribute values

2   for each project are capable of comprising one or more of the following project attribute

3   values: project comments, a project manager, projected completion date, project purpose,

4   project start date, project actual completion date, project status, project holidays, and

5   project interrupts.

1   69.   The computer readable medium of claim 67, further comprising:

2   a calendar subdirectory for each project subdirectory, wherein the calendar

3   subdirectory includes one calendar file for each day for which calendar information is

4   provided for the project.

1   70.   The computer readable medium of claim 57, further comprising:

2   a task subdirectory in the subdirectory for the project including each task for

3   which user input is received; and

4   one attribute file indicating a received attribute value for each received attribute

5   value providing information on the task.